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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,352	12/01/2003	Isabelle M. Rouvellou	YOR920030519US1	1283
48355 7590 12/14/2007 PATTERSON & SHERIDAN LLP IBM CORPORATION 595 SHREWSBURY AVE SUITE 100 SHREWSBURY, NJ 07702			EXAMINER FERNANDEZ RIVAS, OMAR F	
			ART UNIT 2129	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/725,352

Applicant(s)

ROUVELLOU ET AL.

Examiner

Omar F. Fernández Rivas

Art Unit

2129

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5,9-21 and 24-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,9-21 and 24-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/4/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This Office Action is in response to an RCE filed by the Applicant entered on October 31, 2007.
2. The Office Actions of November 12, 2007, March 15, 2007, May 5, 2006 and October 6, 2006 are incorporated into this Non-Final Office Action by reference.

### *Status of Claims*

3. Claims 1, 17 and 24 have been amended. Claims 6-8, 22-23 and 29-30 were previously cancelled. Claims 1-5, 9-21 and 24-28 are pending on this application.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 9-21 and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abrari et al in view of Serrano-Morales et al (US Patent #7,020,869, referred to as **Abrari**; US Patent #6,965,889, referred to as **Serrano**).

### **Claims 1, 17 and 24**

Abrari teaches a method, a system and a computer readable media for authoring and executing an individualized language business rule (**Abrari**: abstract, C1, 19-32),

comprising: creating at least one individualized language resource, said at least one individualized language resource being mapped onto at least one executable object (**Abrari**: C4, L51-67, C5, L1-11; C7, L25-47; C12, L50-53; Figs. 3, 6 and 17; Examiner's Note (EN): defining a name for an entity is creating an individualized language resource as interpreted from paragraphs 9, 60 and 61 of the Application's specification. It is inherent that any variable or statement created to produce a function in a computer will be mapped into an executable object that the computer can interpret upon compilation); creating at least one individualized language rule referencing at least one of said individualized language resource (**Abrari**: C4, L63-67, C5, L1-11; C7, L63-67; C8, L1-6; C12, L50-53; Figs. 3, 6 and 17; EN: developing business rules using the vocabulary); organizing said at least one individualized language resource and said at least one individualized language rule into at least one individualized language rule set (**Abrari**: C4, L51 to C5, L11; Fig. 1); and transforming said at least one individualized language rule into computer executable format (**Abrari**: C2, L23-65; C4, L34-67; C5, L1-42; C6, L19-38; EN: in a computer system, all data must be transformed to computer executable format so that the computer can operate upon it).

Abrari does not teach creating at least one individualized rule template; and creating at least one individualized rule from said at least one individualized rule template based on user-selected inputs and outputs to the individualized rule template, the user-selected inputs and outputs being selected by the user from rule set input and output groups, respectively.

Serrano teaches creating at least one individualized rule template (**Serrano:** abstract, L1-11, C3, L26-49); and creating at least one individualized rule from said at least one individualized rule template based on user-selected inputs and outputs to the individualized rule template, the user-selected inputs and outputs being selected by the user from rule set input and output groups, respectively (**Serrano:** C3, L26 to C4, L41; C6, L56 to C7, L19; C7, L26 to C8, L14; EN: paragraph 9 applies. The template instances are created based on the user's inputs. Moreover, the rules engineer generates templates that contain the rule elements).

It would have been obvious to one of ordinary skill in the arts at the time of the applicant's invention to modify the teachings of Abrari by creating at least one individualized rule template; and creating at least one individualized rule from said at least one individualized rule template based on user-selected inputs and outputs to the individualized rule template, the user-selected inputs and outputs being selected by the user from rule set input and output groups, respectively as taught by Serrano for the purpose of making it easier for a user to provide the appropriate data needed to create a rule.

Abrari does not teach scoping a vocabulary of the rule set input and output groups, which form groups of choices available to the user for building the individualized rule, in accordance with one or more choices made by the user.

Serrano teaches scoping a vocabulary of the rule set input and output groups, which form groups of choices available to the user for building the individualized rule, in accordance with one or more choices made by the user (**Serrano:** C2, L15-28; C3 L26

to C4, L41; C6, L56 to C7, L51; C10 and 11, claims 1 and 11; Fig. 5; EN: paragraph 9 applies. The user edits the rule elements. By doing so, the user is constraining (scoping) the values that the rule elements of the template may contain. The choices presented to the user for each element are groups for building the rule. Moreover, the templates generated by the rules engineer contain the rule elements (the vocabulary) that may be chosen by a user to generate the rules.

It would have been obvious to one of ordinary skill in the arts at the time of the applicant's invention to modify the teachings of Abrari by scoping authored templates and rules based upon rule set input and output groups chosen by a user as taught by Serrano for the purpose of setting constraints on the rules that will be created.

**Claims 2, 18 and 25**

Abrari teaches preventing a syntactically incorrect individualized language statement from being authored (**Abrari**: C10, L49-67; EN: paragraph 9 applies. By checking and correcting the completeness (syntax) of a rule, syntactically incorrect rules will not be created).

**Claims 3, 19 and 26**

Abrari teaches deploying said at least one transformed executable to a runtime environment and executing said at least one transformed individualized language rule (**Abrari**: C2, L23-65; C4, L34-39; EN: the deployment platform used by the invention is a runtime environment).

**Claims 4, 20 and 27**

Abrari teaches executing at least one non-individualized language rule (**Abrari**: C4, L51-62; C6, L39-51; Figs. 1 and 2; EN: integrating rules with diverse application components (runtime environments) is executing a non-individualized language rule as understood from paragraph 55 of the Application's specifications).

**Claims 5, 21 and 28**

Abrari teaches coordinating and cooperating by a runtime engine with other rules engines in a runtime environment (**Abrari**: C6, L20-51; Fig. 2; EN: interacting with various business components).

**Claim 9**

Abrari teaches transforming said at least one of an individualized language resource, an individualized language rule, an individualized rule template, and individualized language rule set into a standardized format (**Abrari**: C6, L19-51; Fig. 2).

**Claim 10**

Abrari teaches at least one individualized language rule set influences at least one of application behavior and application state (**Abrari**: C8, L7-11; C20, L63-67, C21, L1-20; Fig. 6; EN: executing an action when a condition is met influences an application's behavior and state).

**Claim 11**

Abrari teaches directly or indirectly linking an application to an execution of at least one individualized language rule set (**Abrari**: abstract; C8, L7-44; C20, L63-67,

C21, L1-20; Fig. 6).

**Claim 12**

Abrari does not teach creating a type-safe linkage between an application and said at least one individualized language rule set.

Serrano teaches creating a type-safe linkage between an application and said at least one individualized language rule set (**Serrano**: C2, L15-28, C3, L35-67; Fig. 1A; EN: the rule elements define the rule structure and the application applying the rule must use (are linked) these rule elements).

It would have been obvious to one of ordinary skill in the arts at the time of the applicant's invention to modify the teachings of Abrari by creating a type-safe linkage between an application and said at least one individualized language rule set as taught by Serrano for the purpose of providing the application with the correct data to apply a given rule.

**Claim 13**

Abrari teaches deploying said type-safe linkage in a runtime environment (**Abrari**: C4, L34-39; C10, L17-67; EN: a computer system performs its operations in a runtime environment).

**Claim 14**

Abrari teaches finding, updating and deleting an item contained within said standardized format (**Abrari**: C6, L52-63; EN: to modify (update or delete) a rule it must be found).



**Claim 15**

Abrari does not teach employing said type-safe linkage to select said at least one individualized rule set based on externalized criteria.

Serrano teaches employing said type-safe linkage to select said at least one individualized rule set based on externalized criteria (**Serrano**: C2, L15-28; C3, L55-67; C4, L5-12; EN: selecting the rules based on the inputs given by the user).

It would have been obvious to one of ordinary skill in the arts at the time of the applicant's invention to modify the teachings of Abrari by employing said type-safe linkage to select said at least one individualized rule set based on externalized criteria as taught by Serrano for the purpose of allowing the system to determine which rule can operate on a given input data.

**Claim 16**

Abrari does not teach transforming said type-safe linkage into a standardized format.

Serrano teaches transforming said type-safe linkage into a standardized format (**Serrano**: C4, L43-63).

It would have been obvious to one of ordinary skill in the arts at the time of the applicant's invention to modify the teachings of Abrari by transforming said type-safe linkage into a standardized format as taught by Serrano for the purpose of making the data types used by the rules compatible with different applications.

### **Response to Applicant's arguments**

5. The Applicant's arguments regarding the rejection under 35 USC 103 have been fully considered but are not persuasive.

#### **In reference to Applicant's arguments on page 7:**

The Examiner's attention is respectfully directed to the fact that Abrari and Serrano-Morales, individually or in any permissible combination, fail to teach, show or suggest the novel invention of creating at least one individualized language rule by scoping the vocabulary of rule set input and output groups, from among which a user may select inputs and outputs (i.e., variables) to a rule template, in accordance with one or more choices made the user, as positively claimed in the Applicants' amended independent claims 1, 17 and 24.

#### **Examiner's response:**

First it is noted that the limitation to which the applicant is referring to does not mention rule template.

Paragraph 9 applies. As disclosed in the cited portions of Serrano, the user is presented with an interface for editing the rule elements. The choices presented to the user for each element are considered "a vocabulary". The user selects or scopes, the values that the rule elements of the template may contain. Examples of the rule elements that the user can edit are operators, variables, constants (all three considered inputs), conditions and actions (both considered outputs) (**Serrano**: C2, L15-28; C3 L26 to C4, L41; C6, L56 to C7, L51; C10 and 11, claims 1 and 11). Moreover, the claim recites *scoping a vocabulary of the rule set input and output groups, which form groups of choices available to the user for building the individualized rule, in accordance with one or more choices made by the user*. If the user is selecting or setting values (choices made by the user) to the rule elements from the choices presented, then he is

scoping the vocabulary (the list of choices that the element may contain) in order to form the rules. Applicant must understand that claims are not just words listing out invention elements...they are limitations that define the fundamental claim scope.

**In reference to Applicant's arguments on pages 10-11:**

The Examiner concedes on Page 4 of the Final Office Action that "Abrari does not teach scoping contents of the rule set input and output groups chosen by a user in accordance with one or more choices made by the user". Serrano-Morales does not bridge this gap in the teachings of Abrari. Specifically, Serrano-Morales also does not teach, show or suggest scoping the vocabulary of rule set input and output groups, which form groups of choices available to the user for building the individualized rule, in accordance with one or more choices made the user.

The Examiner submits in the Final Office Action that the user interface generator taught by Serrano-Morales creates interfaces (for guiding a user in creating rules) that limit the choices that the user may choose for the editable rule elements. The Applicants submit that although Serrano-Morales does teach that the user interface presents the choices that the user may choose for rule elements, these choices are not scoped by other choices made by the user. At best, Serrano Morales teaches that the choices are scoped by rule element providers that "define a set of choices that a user may choose for a particular editable rule element" (Serrano-Morales at column 3, lines 50-52). The rule element providers are not the same as the user who edits the rules. The user, according to Serrano-Morales's system, therefore has no input in the scoping of the choices.

The Applicants emphasize that the invention does not claim scoping the rules themselves according to user selections, but rather scoping the list of choices available to the user for building the rules (i.e., the variables, or, in the parlance of Serrano-Morales, the rule elements"), in accordance with user selections (e.g., of vocabulary, inputs, and outputs). Serrano-Morales simply does not teach, show or suggest that the choices available to the user for selection as a rule element are scoped according to previous selections made by the user. Thus, Serrano-Morales, like Abrari, does not contemplate the user as a source for scoping the choices from among which a rule template variable (e.g. an input, output, or "rule element") can be chosen.

**Examiner's response:**

The arguments regarding "scoping the vocabulary" have been addressed above in the previous Examiner's response and in the rejection of claim 1 and apply to these arguments.

As for the argument that Serrano-Morales does not teach, show or suggest that the choices available to the user for selection as a rule element are scoped according to previous selections made by the user, this limitation is not in the claim. However, Serrano discloses a user interface generator which creates interfaces to guide a user to create or edit rules according to definitions specified by rule templates (**Serrano**: C3, L25 to C4, L11). These interfaces are generated based on the rule element data and present and limit the choices that the user may choose for the editable rule elements. Moreover, the selections available to the user are generated by the rules engineer and used to create the rule template.

**Examination Considerations**

6. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 105455, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

7. Examiner's Notes are provided with the cited references to prior art to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior art but a link to prior art that one of ordinary skill in the art would find inherently appropriate.

8. Unless otherwise annotated, Examiner's statements are to be interpreted in reference to that of one of ordinary skill in the art. Statements made in reference to the condition of the disclosure constitute, on the face of it, the basis and such would be obvious to one of ordinary skill in the art, establishing thereby an inherent prima facie statement.

9. Examiner's Opinion: paragraphs 6-8 apply. The claims and only the claims form the metes and bounds of the invention. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

### **Conclusion**

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hayward et al. US Patent #5,574,828

Amado US Patent #5,701,400

Murray et al. US Patent #5,809,492

Leymann et al. US Patent #6,826,579

Feldman et al. USPGPUB #2002/0198856

11. Claims 1-5, 9-21 and 24-28 are rejected.

***Correspondence Information***

12. Any inquires concerning this communication or earlier communications from the examiner should be directed to Omar F. Fernández Rivas, who may be reached Monday through Friday, between 8:00 a.m. and 5:00 p.m. EST. or via telephone at (571) 272-2589 or email [omar.fernandezrivas@uspto.gov](mailto:omar.fernandezrivas@uspto.gov).

If you need to send an Official facsimile transmission, please send it to (571) 273-2589.


If attempts to reach the examiner are unsuccessful the Examiner's Supervisor, David Vincent, may be reached at (571) 272-3080.

Hand-delivered responses should be delivered to the Receptionist @ (Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22313), located on the first floor of the south side of the Randolph Building.

Omar F. Fernández Rivas  
Patent Examiner  
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Wednesday, December 12, 2007.



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